

### **REMARKS**

In the Office Action mailed 10/26/00, Claims 1-20 were rejected by the prior art under 35 U.S.C. §102(b). In response, Applicant has drafted new claims 21-40 and canceled Claims 1-20.

Applicant respectfully traverses the Examiner's rejections for the reasons set forth below, and requests that the claims as now filed be allowed.

The arguments presented in the Response filed 9/1/00 are incorporated herein by reference.

#### **Specific Response to Grounds for Rejection of original claims 1-20 (as it may apply to new claims 21-40)**

In his Office Action, the Examiner states in his closing paragraph that "the applicant's own admission in the specification; [namely] that a discover signal is a signal used by the IR industry to wake up other appliances is evidence that a discover signal is functionally equivalent to, and a well known example of a wake up signal."

Applicant is respectfully concerned that the Examiner has not recognized what Applicant's invention is, and what it is not. The following discussion re-phrases the arguments made in Applicant's 9/1/00 response, in the hope that the novelty of Applicant's invention will become apparent:

**I. A “discovery signal” refers to a signal and its content that is IrDA compliant**

Applicant does not seek to claim the “discovery signal” as a part of its invention, but only seeks to claim a device that responds uniquely to a “discovery signal.” In fact, Applicant freely admits that the “discovery signal” is a well-known infrared signal having particular *digital content* that identifies it as a “discovery signal” (and differentiates it from all other Ir signals). As shown in the Infrared Data Association (IrLAP) document of 6/16/96 (excerpts provided by Applicant in a previous Information Disclosure Statement), the term “discovery signal” refers to one thing and one thing only under IrDA specifications, namely the Ir signal that is sent by one device to demonstrate its desire to commence Ir communications with another Ir-capable device. Until a device receives a “discovery signal,” it will not respond to incident Ir signals; similarly, the first signal sent by a (previously non-communicating) device is the “discovery signal.” It should be clear, then, that the Ir “discovery signal” is well-known, and is recognizable as a “discovery signal” because of its *content* and its compliance with the IrDA specifications.

**II. Previous IrDA-compliant devices do not respond to “discovery signals” in the same manner as Applicant’s novel device**

The infrared transceiver systems in conventional IrDA-compliant devices do not operate in a low-power-demand mode; they provide a single, full-power mode of operation, whether or not they are engaged in infrared communications with another device. As such, the prior devices do not switch between power modes responsive to any received signals. What occurs in the conventional IrDA-compliant devices is that when not communicating, the device is idle, but in full-power-mode. When the device receives a signal that has the

*content* identifying it as a “discovery signal,” the device responds by transmitting an answering signal (in accordance with IrDA specifications).

Applicant’s invention responds in a completely different manner, namely, when it is idle, it’s transceiver circuitry is maintained in a low-power-demand mode (which enables it to continue to “listen” for a “discovery signal”); when the device recognizes the *content* of an incident Ir signal as identifying that signal as a “discovery signal,” Applicant’s device switches to a full-power-demand mode (and then commences communications). It should be clear that while the “discovery signal” is the same, the response by Applicant’s device to that “discovery signal” is different than any reference cited or known by Applicant.

**III. Kohler does not respond to an incident Ir signal like Applicant’s novel invention, nor does Kohler disclose the same structure as Applicant**

As discussed previously, the Kohler device terminates power to its “signal processing circuit” while in its “rest state;” the “power supply energy” is restored to the “signal processing circuit” in response to a “wake-up pulse” being received by the device. It should be clear that until the “signal processing circuit” is supplied with “power supply energy,” the Kohler device will be unable to interpret any content of incident Ir signals (i.e. it’s ability to do so is turned off).

The Kohler device is designed such that when the amplitude of an incident Ir pulse is of sufficient size, it will “cause [a] current [to] start flowing through [the] photodiode;” this generated current is transmitted to the “control circuit” which responds by activating “power supply energy” to the “signal processing circuit.” Hypothetically, a “discovery signal,” if of sufficient amplitude, could cause the Kohler device to activate “power supply

energy” to its “signal processing circuit;” the problem is that the Kohler device will “wake up” just as quickly if the incident signal is not a “discovery signal” – because the Kohler device is not capable of detecting the *content* of an incident Ir signal, but only its amplitude. Furthermore, Kohler does not disclose the “discovery signal receiver and power actuator module” of Applicant’s invention; this is the module that provides Applicant with the capability to interpret the *content* of incident Ir signals, and then responding when it detects that it has received a signal having the *content* of a “discovery signal.”

#### **IV. Summary**

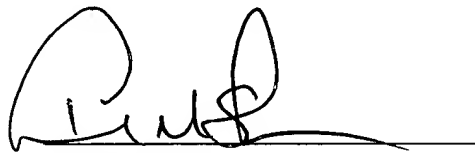
It is Applicant’s hope that the foregoing discussion makes it clear to the Examiner that: (1) Kohler fails to disclose, suggest or hint at Applicant’s novel and nonobvious device recited in Claims 21-40; (2) that Applicant is not claiming a particular Ir signal, but only its device’s response to a particular Ir signal content; and (3) neither Kohler nor any other conventional IrDA-compliant device responds like Applicant’s device to an incident “discovery signal.”

**Conclusion**

In view of the foregoing amendments and remarks, Applicant respectfully requests that the application be reconsidered, the claims be allowed, and the case passed to issue.

Respectfully submitted,

STEINS & ASSOCIATES

A handwritten signature in black ink, appearing to read 'K. Steins', written over a horizontal line.

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